

CLAIMS

We claim:

1. A vehicle location display of a navigation system comprising:

5 a database of a plurality of road segments each having an associated road segment name;

a display displaying a map at a variable scale, said map comprising a plurality of said road segments including a current road segment;

10 said display displaying an associated road segment name adjacent said current road segment when said variable scale is below a threshold scale;

said display displaying said associated road segment name of said current road segment in a current location field on said display not adjacent said current road segment when said variable scale is above said threshold scale.

15 2. A vehicle location display of a navigation system as recited in Claim 1 further including a position determining system, said position determining system determining said current road segment and a current vehicle location on said current road segment; and

20 said display displaying a vehicle cursor at said current vehicle location.

3. A vehicle location display of a navigation system as recited in Claim 1 further including a user input device; and

a map scaler, said map scaler changing said variable scale of said map in response to input from said user input device.

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4. A vehicle location display of a navigation system as recited in Claim 1 wherein said current location field is in a fixed location on said display independent of the location of said current road segment on said display.

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5. A vehicle location display of a navigation system as recited in Claim 1 wherein said display accents said current road segment when said variable scale is above said threshold scale.

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6. A vehicle location display of a navigation system as recited in Claim 5 wherein accenting said current road segment includes displaying said current road segment in a first color different from the color of other road segments; and

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said display displaying said associated road segment name of said current road segment in said current location field in said first color when said variable scale is above said threshold scale.

7. A vehicle location display of a navigation system as recited in Claim 6 further comprising:

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said database including a plurality of ranks, each of said ranks associated with at least one of said road segments;

each of said ranks associated with one of a plurality of rank colors, none of said plurality of rank colors being said first color;

5 said display displaying each of said road segments except said current road segment of said map in an associated rank color.

8. A vehicle location display of a navigation system as recited in Claim 1 further comprising:

10 a previous cross street and a next cross street of said current road segment;

 said display accenting a portion of said previous cross street and said next cross street.

15 9. A vehicle location display of a navigation system as recited in Claim 8 wherein accenting said portion of said previous cross street and said next cross street includes displaying said portion of said previous cross street and said next cross street in a second color different from the color of other road segments.

20 10. A vehicle location display of a navigation system as recited in Claim 1 further including a map panning cursor, said map panning cursor movable about said map in response to input from a user input device; and

said display accenting a panned road segment, said panned road segment selected with said map panning cursor.

11. A vehicle location display of a navigation system as recited in Claim 10 wherein accenting said panned road segment comprises displaying said panned road segment in a pan color different from the color of other road segments.

12. A vehicle location display of a navigation system as recited in Claim 10 wherein said display displays said road segment name associated with said panned road segment in a panned road segment field on said display in a pan color when said scale is above said threshold scale.

13. A vehicle location display of a navigation system as recited in Claim 10 wherein said map panning cursor includes a directional indicator, said directional indicator indicating a direction from said map panning cursor to a current vehicle location.

14. A vehicle location display of a navigation system as recited in Claim 10 wherein said display displays a distance field, said distance field displaying a distance between said map panning cursor and a current vehicle location.

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15. A vehicle location display of a navigation system as recited in Claim 1 wherein said display further includes a current heading field, said current heading field displaying a current compass heading of a vehicle.

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A vehicle location display of a navigation system comprising:

a database of a plurality of road segments;

a position determining system, said position determining system determining a current road segment and a current vehicle location on said current road segment;

a display displaying a first map at a first scale and comprising a plurality of said road segments including said current road segment;

a said display displaying a second map and said first map, ^{simultaneously} said second map comprising a plurality of said road segments including said current road segment, said second map having a second scale less than said first scale.

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A vehicle location display of a navigation system as recited in Claim

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a user input device; and

a map scaler, said map scaler changing said first scale of said first map in response to input from said user input device;

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A vehicle location display of a navigation system as recited in Claim

wherein said display displays a road segment name adjacent said current road segment and a vehicle cursor at said current vehicle location on said first map when said first scale of said first map is below a threshold scale.

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~~16~~ A vehicle location display of a navigation system as recited in Claim wherein said display displays a road segment name adjacent said current road segment on said second map.

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~~16~~ A vehicle location display of a navigation system as recited in Claim wherein said display displays said second map within said first map.

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~~16~~ A vehicle location display of a navigation system as recited in Claim further comprising:

10 said database including a plurality of ranks, each of said ranks associated with at least one of said road segments;

each of said ranks associated with one of a plurality of rank colors;

said display displaying each of said road segments of said first map and said second map in an associated rank color.

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~~16~~ A vehicle location display of a navigation system as recited in Claim wherein said second map further includes a border, said border surrounding said second map and having a color other than said plurality of rank colors.

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~~16~~ A vehicle location display of a navigation system as recited in Claim wherein said display further includes a current heading field, said current heading field displaying a current compass heading of a vehicle.

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A method for displaying a current vehicle location on a display of a navigation system comprising the steps of:

a.) determining a current vehicle location relative to a database of road segments;

5 b.) displaying a plurality of said road segments and said current vehicle location;

c.) adjusting a scale of said display; and

d.) displaying in a first mode when said scale is below a threshold scale and displaying in a second mode when said scale is above said threshold.

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A method as recited in Claim ²⁶~~24~~ wherein:

step b.) further comprises displaying said plurality of said road segments and said current vehicle location on a map;

15 step c.) further comprises adjusting a scale of said map; and

step d.) further comprises in said first mode displaying a road segment name associated with said current vehicle location adjacent said current vehicle location and in said second mode displaying said road segment name associated with said current vehicle location in a current location field.

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A method as recited in Claim ²⁶24 wherein:

step b.) further comprises displaying said plurality of said road segments and said current vehicle location on a first map;

step c.) further comprises adjusting a scale of said first map; and

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step d.) further comprises in said first mode displaying on said first map said current vehicle location and in said second mode displaying said first map and a second map, said second map having a scale below said threshold and including said current vehicle location.

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A vehicle location display of a navigation system comprising:

a database of a plurality of road segments;

a position determining system, said position determining system determining a current vehicle location relative to said database;

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a display having a variable scale and displaying a plurality of said road segments and said current vehicle location in a first mode when said variable scale is below a threshold and displaying a plurality of said road segments and said current vehicle location in a second mode when said variable scale is above a threshold.

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A vehicle location display of a navigation system as recited in Claim wherein said display displays a map including said plurality of said road segments and said current vehicle location;

in said first mode said display displays an associated road segment name adjacent said current vehicle location on said map; and

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in said second mode said display displays said associated road segment name in a current location field on said display.

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A vehicle location display of a navigation system as recited in Claim wherein:

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said display displays a first map at said variable scale and including said plurality of said road segments and said current vehicle location when said display is in said first mode; and

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said display displaying a second map and said first map when said display is in said second mode, said second map comprising a plurality of said road segments including said current road segment and a vehicle cursor displayed at said current vehicle location, said second map having a scale less than said threshold scale.

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